

HYGIENIC BALL VALVES M3H TRUE BORE (1/2" to 2" – DN 10 to DN 50)

DESCRIPTION

The ADCAPure M3H three pieces body ball valves are isolating valves designed for use with clean steam, condensate and other gases and liquids used in high purity and aseptic processes.

The valve is not designed as a control valve and should only be used as an isolating valve, fully open or fully closed.

The product is mainly designed for the pharmaceutical, biotech, semiconductor, cosmetics, fine chemical and food & beverage industries.

MAIN FEATURES

True bore floating ball design.

A351 CF3M body and ends with ferrite content of less than 2% and low sulphur between 0,005 and 0,017%.

Can be serviced without removal from the pipeline.

Tube weld with loose body flanges (360° rotation after installation).

Bidirectional.

Antistatic device.

Anti blow out proof stem.

ISO 5211 mounting.

STANDARD SURFACE FINISH

Internal wetted parts: ≤ 0,51 µm Ra – SF1.

External: as casted.

Other surface conditions see TIS.GIA – General information ADCAPure.

Ultrasonic cleaning.

OPTIONS:

Different sealing materials.

Degreased for oxygen use.

Cavity fillers.

Lever with locking system.

For more options and extras, please consult IS M3H.100 – Sanitary Ball Valves Additional Options and Extras.

USE:

Clean steam, gases and liquids compatible with the construction.

AVAILABLE

MODELS:

M3H – investment casting.

SIZES:

1/2" to 2"; DN 10 to DN 50.

CONNECTIONS:

ASME BPE or DIN clamp ferrules, tube weld (ETO) ends or a combination of both.
Others on request.

PACKAGING:

Assembling and packaging in a clean room certified according to ISO 14644-1.

The product is end capped and sealed with recyclable thermo-shrinkable plastic film to avoid contamination.

INSTALLATION:

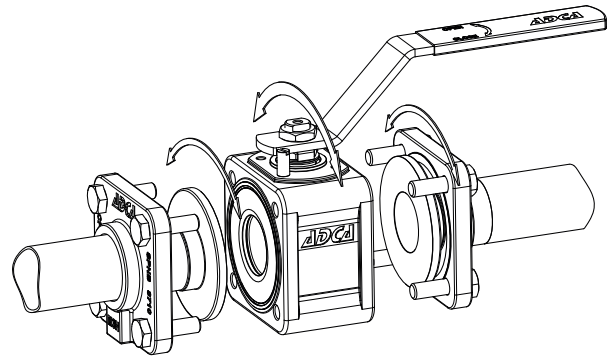
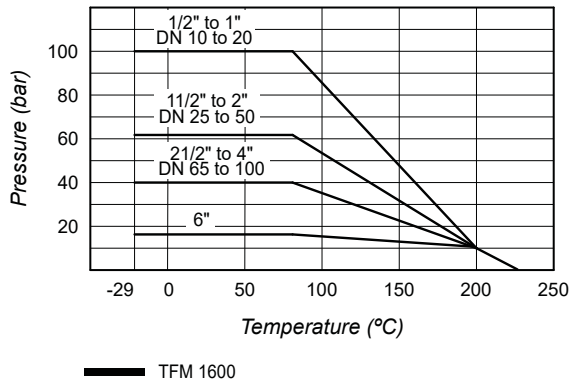
See IMI – Installation and maintenance instructions.



CE MARKING – GROUP 2 (PED - European Directive)

PN 63	PN 100	Category
DN 25 to 32	1/2" to 1" DN 10 to 20	SEP
1 1/2" to 2" DN 40 and 50	—	1 (CE marked)

PRESSURE / TEMPERATURE LIMITS



Tube weld easy and quick installation

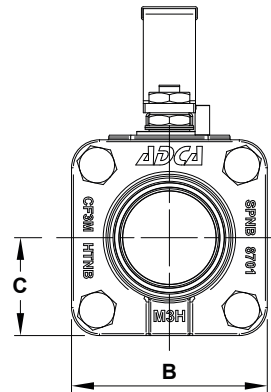
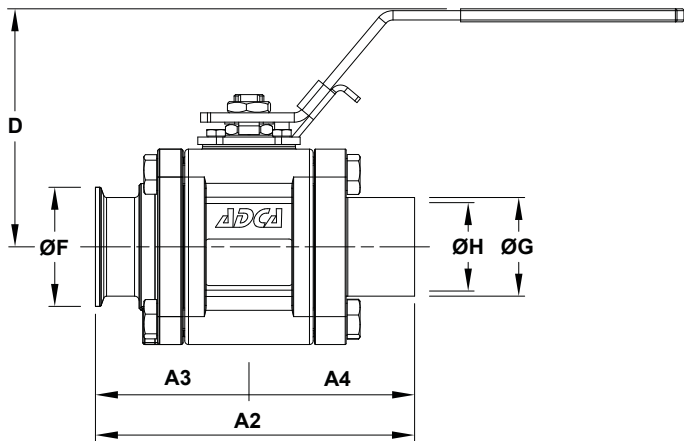
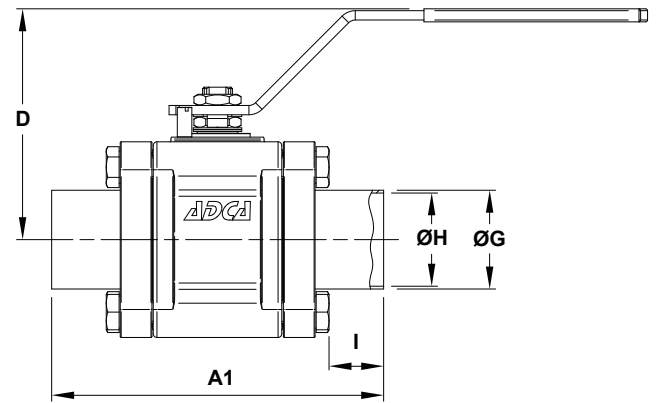
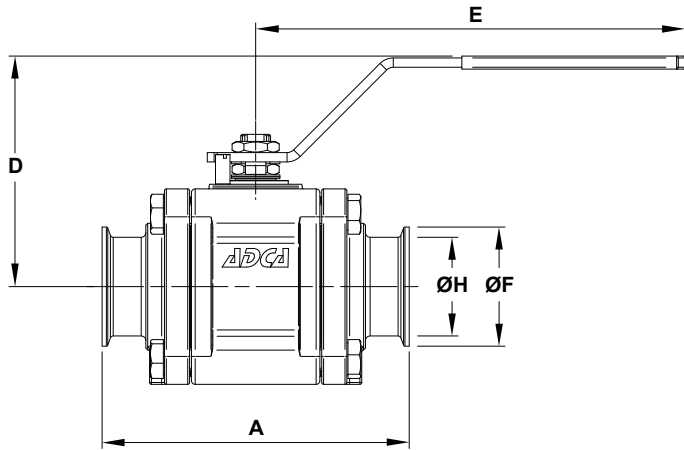
Remark: Maximum operating conditions may be limited by the valve end connections due to normative restrictions.

Valves with tube weld (ETO) connections are fitted, as standard, with loose body flanges which allow installation with no need to align the end connections. After installation the valve can rotate freely 360° to the desired orientation.

LEVER OPTIONS	
FLAT LEVER	FLAT LEVER WITH LOCKING SYSTEM

STEM EXTENSION UNITS *		
SEF/H	SEF/P	SEF/A

*Consult IS M3H.100 – Sanitary Ball Valves Additional Options and Extras – for further information.

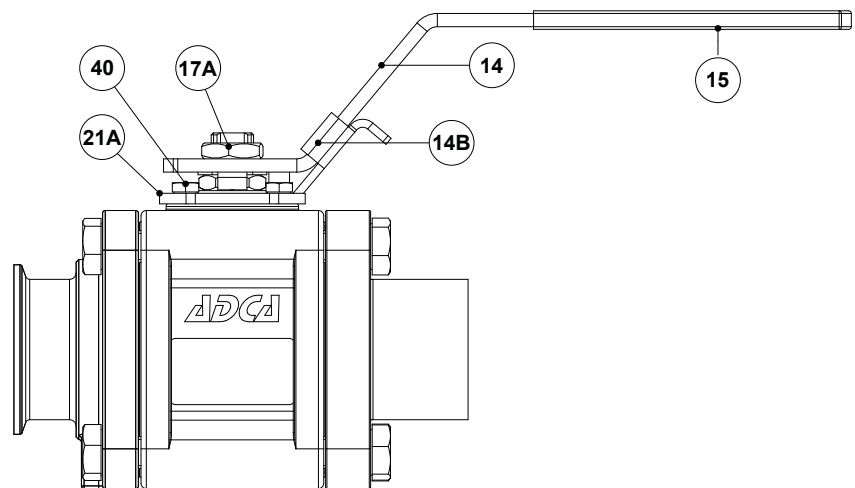
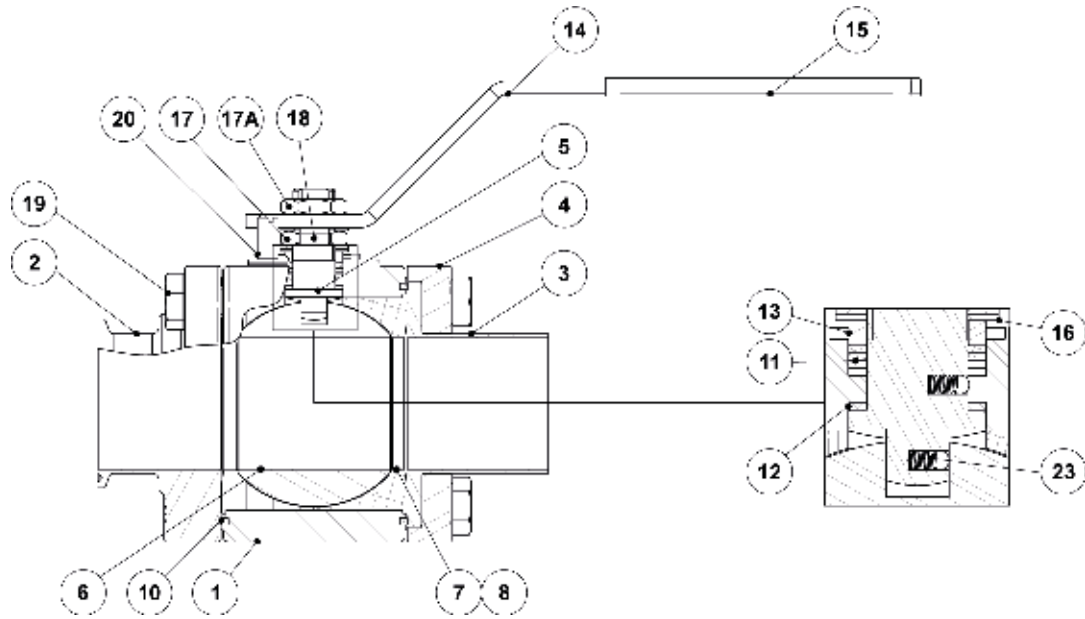


DIMENSIONS – ASME BPE (mm)

SIZE	A	A1	A2	A3	A4	B	C	D	E	ØF	ØG	ØH	I	BALL PORT	ISO 5211	WGT. (kg)
1/2"	88,9	101,6	95,5	51,5	44	42	21	65	150	25	12,7	9,4	25	9,4	F03	0,42
3/4"	101,6	114,3	108	57	51	50	25	69	150	25	19,1	15,8	27	15,8	F03	0,99
1"	114,3	127	120,5	63,5	57	62	31	87	175	50,4	25,4	22,1	27	22,1	F04	2,1
1 1/2"	139,7	152,4	146,5	76,5	70	85	42,5	114	207	50,4	38,1	34,8	27	34,8	F05	4,3
2"	165,1	177,8	171,5	89	82,5	105	52,5	124	232	63,9	50,8	47,5	28	47,5	F05	7,3

DIMENSIONS – DIN (mm)

SIZE	A	A1	A2	A3	A4	B	C	D	E	ØF	ØG	ØH	I	BALL PORT	ISO 5211	WGT. (kg)
DN 10	90	102	96	51	45	42	21	65	150	34	13	10	25	10	F03	0,73
DN 15	100	114	107	57	50	50	25	69	150	34	19	16	27	16	F03	1,49
DN 20	115	127	121,5	64	57,5	62	31	87	175	34	23	20	27	20	F04	1,94
DN 25	125	135	130,5	68	62,5	72	36	92	175	50,5	29	26	27	26	F04	2,62
DN 32	140	153	147	76	71	85	42,5	114	207	50,5	35	32	27	32	F05	4,41
DN 40	150	161	155	80	75	95	47,5	119	207	50,5	41	38	27	38	F05	5,5
DN 50	165	178	172	90	82	105	52,5	124	232	64	53	50	28	50	F05	7



Optional flat lever with locking system

MATERIALS

POS. N°	DESIGNATION	MATERIAL	POS. N°	DESIGNATION	MATERIAL
1	Valve body	A351 CF3M / 1.4409	14	Handle	AISI 304 / 1.4301
2	Clamp ferrule end connection	A351 CF3M / 1.4409	14B	Locking piece	AISI 304 / 1.4301
3	Tube weld end connection	AISI 316L / 1.4404	15	Handle end	Vinyl
4	Flange	A351 CF8M / 1.4408	16	Spring washers	Stainless steel A2
5	Stem	AISI 316L / 1.4404	17	Compression nut	AISI 304 / 1.4301
6	* Valve ball	AISI 316L / 1.4404	17A	Nut	AISI 304 / 1.4301
7	* Standard seat	TFM 1600	18	Lock washer	AISI 304 / 1.4301
8	* Cavity filler seat	TFM 1600	19	Body fixing bolts	Stainless steel A2-70
10	* Body seal	PTFE	20	Stop pin	AISI 304 / 1.4301
11	* Stem seals	TFM 1600	21A	Locking flange	AISI 304 / 1.4301
12	* Stem thrust seal	TFM 1600	23	Antistatic device	AISI 316 / 1.4401
13	* Spacer	AISI 316 / 1.4401	40	Fixing bolts	Stainless steel A2-70

* Available spare parts.

Remarks: FDA / USP Class VI seals certificate on request.

All valves have a serial number. In case of non-standard valves, this number must be supplied if spare parts are ordered.

ORDERING CODES M3H												
Valve model	MH	X	X	X	F	X	X	CB	X	15		
M3H – A351 CF3M / 1.4409 3 pieces ball valve	MH											
Lever handle												
Flat lever in stainless steel with plastic cover		X										
Flat lever in stainless steel with plastic cover and locking system		3										
Bare stem		9										
Material												
A351 CF3M / 1.4409			X									
Seat design												
Standard seats					X							
Cavity fillers					F							
Seat material												
TFM 1600						F						
Surface finish a)												
Standard surface finish								X				
Electropolished internal wetted parts (SF5)								E				
Special features												
None								X				
Degreased for oxygen								O				
Condensate drain connection – Clamp ferrule b)								C				
Condensate drain connection – Tube weld (ETO) b)								T				
Pipe connection												
Clamp ferrule ASME BPE									CB			
Clamp ferrule DIN (DIN 32676-A)									CD			
Tube weld (ETO) according to ASME BPE									TB			
Tube weld (ETO) according to DIN 11866-A (DIN 11850-2)									TD			
TC/ETO combination ASME BPE									CTB			
TC/ETO combination DIN 32676-A / DIN 11866-A									CTD			
Ball port												
True bore										X		
Size												
DN 10												10
1/2" or DN 15												15
3/4" or DN 20												20
1" or DN 25												25
DN 32												32
1 1/2" or DN 40												40
2" or DN 50												50
Special construction / Additional options												
Full description or additional codes have to be added in case of a non standard combination												E

a) Consult TIS.GIA – General information ADCAPure – for further details and other surface finish options. b) According to ASME BPE or DIN depending on selected pipe end connections.